

**Notice of Allowability**

Application No.

10/688,716

Examiner

Susan F. Rayyan

Applicant(s)

WILLIAMS ET AL.

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2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

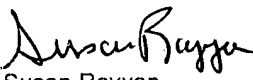
1. ☒ This communication is responsive to 1/8/2007.
2. ☒ The allowed claim(s) is/are 1,3-7,9-35, now renumbered as clims 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

  
Susan Rayyan  
March 17, 2007

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Bradley D. Lytle, Registration Number 40, 073 on March 13.

The application has been amended as follows:

### CLAIMS

In claim 1,

Line 15, replaced "data carrier" with -- computer readable storage medium --

Line 16 replaced "data carrier" with -- computer readable storage medium --

Line 19, replaced "data carrier" with -- computer readable storage medium --

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In claim 4,

Line 4, replaced "data carrier" with -- computer readable storage medium --

In claim 5,

Line 3, , replaced "data carrier" with -- computer readable storage medium --

In claim 10,

Line 7, replaced "data store" with -- computer readable storage medium--

Line 11, replaced "data store" with -- computer readable storage medium--

Line 18, replaced "data store" with -- computer readable storage medium--

In claim 11,

Line 2, replaced "the quasi-unique reference value" with --the hash value--

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In claim 23,

Line 19-20, replaced "to be stored" with -- to be stored in a computer readable storage medium --

In claim 24,

Line 25-26, replaced "to be stored" with -- to be stored in a computer readable storage medium--

In claim 27,

Line 11, after "storing" inserted -- ,in a computer readable storage medium, --

Line 15, after "a data structure" inserted -- ,in the computer readable storage medium --

Line 22, replaced "the quasi-unique reference value" with --the hash value--

In claim 31,

Line 19, after "storing" inserted -- , in a computer readable storage medium --

In claim 32,

Line 1, replaced "A computer program providing computer executable instructions, which when loaded onto a computer causes the computer" with  
-- A computer readable storage medium storing instructions which when executed by a computer causes the computer --

In claim 33,

Line 1, replaced "A computer program providing computer executable instructions, which when loaded onto a computer causes the computer" with  
-- A computer readable storage medium storing instructions which when executed by a computer causes the computer --

2. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 1, prior art of record does not teach an audio/ video generation apparatus comprising an audio/video generation device configured to generate audio/video material, a metadata generation processor configured to receive audio/video material and generate metadata describing content and attributes of the audio and video material, including a hashing processor to generate a quasi-unique reference from the audio material and particularly the subject matter of the hash value providing a quasi-unique reference to the audio and video material the hash value generated from data values representing the audio and video material in accordance

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with a pre-determined relationship, and including the hash value as part of the metadata, the metadata being stored as a data structure on a computer readable storage medium, the data structure describing the content of at least one shot or sub-shot of the audio and video material, the data structure comprising a volume identification defining the computer readable storage medium, at least one shot identification defining the at least one shot or sub-shot, and a quasi-unique reference value generated from the at least one shot or sub-shot.

Regarding independent claim 10, prior art of record does not teach a metadata generation processor configured to generate metadata describing at least one of content or attributes of audio/video material the metadata generation processor comprising a hash processor configured to receive audio and video material, and particularly the subject matter to generate a hash value from the audio /material with a reduced amount of data than the audio/video material and to store the hash value in a computer readable storage medium the value being generated from data values, the data values selected from parts of the audio and video material, the metadata represented as data structure the data structure describing the content of at least one shot or sub-shot of the audio and video material, the data structure comprising a volume identification defining the computer readable storage medium, at least one shot identification defining the at least one shot or sub-shot, and a hash value generated from the at least one shot or sub-shot.

Regarding independent claim 23 prior art of record does not teach a metadata association processor configured to generate a hash value from at least one of audio

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and video material, the hash value generated from predetermined parts of the audio and video material according to a predetermined relationship which was used by a metadata generation processor to generate the original hash value, the metadata generation processor having generated metadata describing contents or attributes of the audio or video material, and particularly the subject matter of the metadata association processor configured to search the metadata for a match between original hash and generated hash, to associated the metadata stored in association with original hash value with audio and video material from which material the generated hash value was produced based on search results, to cause the information pertaining to the association between the audio and video material from which the generated hash value was produced to and metadata to be stored.

Regarding independent claim 24, prior art of record does not teach an ingestion processor comprising an audio/video material reproduction device to receive and reproduce the audio and video material, a metadata ingestion processor to receive metadata describing the content of the material, metadata including a hash value generated from audio and video material according to a predetermined relationship with the audio and video material, a hashing processor to generate a hash value according to a predetermined relationship of data values from the predetermined parts of the audio and video material used to generate the original hash value, and particularly the subject matter of to search the metadata for a match between original hash value and generated hash value, to associated the metadata stored in association with original

hash value with audio and video material from which material the generated hash value was produced based on search results , to cause the information pertaining to the association between the audio and video material from which the generated hash value was produced to and metadata to be stored.

Regarding independent claim 27 prior art of record does not teach a method of producing at least one of audio and video material with metadata describing at least one of the content and attributes of at least one of the audio and video material, the method comprising generating audio and video material, generating a hash value providing a quasi-unique reference to audio and video material with reduced amount of data than the audio and video material, and particularly the subject matter of the hash value being generated from data values representing predetermined parts of the audio and video material in accordance with a pre-determined relationship, and storing the hash value as part of the metadata, the metadata being stored as a data structure on a computer readable storage medium, the data structure describing the content of at least one shot or sub-shot of the audio and video material , the data structure comprising a volume identification defining the computer readable storage medium, at least one shot identification defining the at least one shot or sub-shot, and a quasi-unique reference value generated from the at least one shot or sub-shot.

As per independent claim 31, prior art of record does not teach a method of associating at least one of audio and video material with metadata describing at least one of the audio and video material the method comprising generating a hash value



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from at least one of audio and video material, the hash value generated from predetermined relationship of data values from predetermined parts of the audio and video material, the predetermine relationship being the same as the one used to generate an original hash value, the original hash value generated with metadata describing contents or attributes of the audio or video material, and particularly the subject matter of searching the metadata for a match between original hash value and generated hash value , associating the metadata stored in association with original hash value with audio and video material from which the generated hash value was produced based on search results , storing information about the association between the audio and video material from which the generated hash value was produced to and metadata.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### **Contact Information**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Rayyan whose telephone number is (571) 272-1675. The examiner can normally be reached M-F: 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan Rayyan

March 15, 2007



CHONG H. KIM  
PRIMARY EXAMINER